# 432 MHz AND ABOVE EME NEWS

# **DFECEMBER 1996 VOL 24 #12**

EDITOR: ALLEN KATZ, K2UYH;

ENGR DEPT., TRENTON STATE COLLEGE, TRENTON, NJ 08650-4700 (W 609-490-2817 OR H 443- 3184, FAX 609-443-1713, AND EMAIL Allen Katz, K2UYH

PRODUCTION ASSIST: TOM KIRK, KA2VAD (908-521-2049).

SKEDS CORD & DIRECTORY: **DL4EBY/DK0TU, KLAUS TIEDEMANN,** HALSKESTR.35, D-12167 BERLIN, (49-30-7955467), E-Mail: <u>Klaus</u>, <u>DL4EBY/DK0TU</u>

E-MAIL LIST CORD: Scott, KD4LT

\*\*\* NA EME BBS: 704-284-4854 \*\*\*

#### **EME NETS:**

14.345 1600 Z SAT/SUN;

- CONTL NA NET: SCOTT, KD4LT AND JAY, K5JL.
- EUR NET: JOE, K1RQG (207-469-3492).
- EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE, FT. COLLINS, CO 80526, (970) 226-0669)
- THE WEB VERSION OF THIS NL IS PRODUCED BY W6/PA0ZN AND AVAILABLE AT: http://www.nitehawk.com/rasmit/em70cm.html

CONDITION: Amidst the news of generally very good conditions, (except for problems with polarization misalignment experienced by some yagi stations on 70 cm - pol. is usually very focused and steady at times of best conditions), during the 1st half of the ARRL EME Contest, comes very sad news of the passing of 2 well known EMEers: KL7WE and CT1WW - see SILENT KEYS near the end of NL.

# **HIGH CONTEST SCORES**

On 432 SM4IVE 122x40, DL9KR 106x40, NC1I 92x34, K1FO 92x32, OE5JFL

89x35, DL9NDD 75x36 and UR5LX 75x35; on 1296 OE9XXI 53x28, F6CGJ 50x?, KB2AH 46x26, F1ANH 46x25, EA6ADW 46x24, F5PAU 42x25, OE5JFL 42x24; on 2300; and on 10 GHz F6KXS 7x5.

## **4X6UJ:**

Howie was active on 1296, but worked only OE9XXI and KB2AH on random. He 80 w and a 3.1 m dish. He did copy about 22 calls. He will have a solid state 200 w PA in Nov and hopes to have 450 w on later. He is looking for a better azimuth rotator for his dish. Howie is currently using HAM-M.

#### **7M2PDT:**

Shu had big damage to his antennas due to a typhoon in Sept -- Half of antennas were dropped to the ground, so I remade a few yagis, and had all cleared up in a week. I worked on 3 Oct G4FUF for initial #43, on 6 Oct JH4JLV #44 and W2CRS #45 and on 19 Oct JA2TY #46. During 1st part of the ARRL Contest I QSO'd the 1st day K4QIF #47, K2UYH, K1FO, NC1I, N2IQU #48, KD4LT, K5GW #49, N9AB #50, JA9BOH, JL1ZCG, SM4IVE, DL9KR, DL9NDD, OH2PO #51, UR5LX, OE5JFL #52, DF3RU, OZ4MM and HA1YA #53, and on the 2nd day W7HAH, KB8ZW, K0RZ, W7GBI, JA4BLC and SM2CEW. The score for the 1st half was 24x16 or 38,400 points. For the 2nd part I will replace my high voltage transformer for some additional power.

#### AA5C:

Greg writes -- I've been QRV on 10 GHz EME since Aug. My 1st contact was with WA7CJO in Jan. I put up a new 3.3 m dish and am running 28 w with a G3WDG preamp. I worked during the 1st weekend of the EME contest DJ7FJ on sked, and F6KSX and WB5LUA on random . I will be looking for sked or random QSOs during the 2nd half. My e-mail address is: <a href="Greggy AA5C">Greggy AA5C</a>

# **DL3EAG:**

Stephan is a new station on 70 cm EME and was active for the contest -- I am located near Disseldorf in JO31DK, and want to send my apologies for the confusion during the last SW. I had some problems with my RX, and woke up just a few minutes before my skeds. The preamp was installed in my shack, but now it's directly behind the coaxial coupler with 40 cm semi-rigid cable. I did manage to work HB9SV on sked with very good sigs, and on the next day UR5LX, DL9NDD on random. During the contest I had the following contacts: SM4IVE - Lars was very loud and readable during the hole weekend (559/529), OH2PO - also loud during the whole weekend (559/439), UR5LX (529/O), DL9NDD (529/O), DL9KR (O/O) - on Saturday but loud on Sunday evening (559/429), OE5JFL (529/439), N2IQU (O/439), NC1I (M/M) - at moon set and PA2CHR (429/O). Fortunately, the big storm (wind about 110 km/h) came on Monday and not on Saturday! So weather here in DL was nice and clear. I'm

looking forward to meeting many others during the next SW. Other than during the contest, skeds are always welcome. My e- mail address is <u>Stephan</u>, <u>DL3AEG</u>

## **EA3DXU:**

Jose says -- The 1st leg of the contest was very nice, with a lot of activity. In the NA window there were many big guns on the band. With my small station, I was able hear stations on every one or two KHz. As usual I spent my time running between 144 and 432, with the more stable conditions on the 70 cm band. On 70 cm, I worked 23x13 with 2 x 38 el yagis and 800 w compared with 19x12 on 144 with 2 x 17 el yagis and 1.1 KW. QSO'd on 432, on 26 Oct DL9KR (569/569), 0032 OH2PO (559/559), 0053 NC1I (439/339), 0059 OE5JFL (549/549), 0106 K1FO (549/549), 0128 DL9NDD (549/559), 0135 UR5LX (549/O), 0145 KD4LT (549/559), 0158 K2UYH (549/559), 0204 N2IQU (549/449), 0211 SM4IVE (569/549), 0223 K4QIF (449/439), 0234 DF3RU (449/O), 2012 OZ4MM (549/539) and 2109 I2COR (O/O), and on 27 Oct 0029 DK3WG (O/O), 0109 WA4NJP (O/O), 1910 ON5OF (O/O), 2026 SM2CEW (539/439), 2043 JS3SIM (O/O) for initial #72, 2321 SM3AKW (O/O), 2349 G4RGK (O/O) and 2357 G3SEK (O/O). Also called were KB8ZW, JA5OVU, HA1YA - many QRZs and W1ZX - very strong.

#### F1ANH:

Jean-Pierre writes -- The 1st night on 432, (no TVI be- cause there were no TV sets on - Hi), I worked 25 stations and 8 initials. The 2nd night I switched to 1296 and QSO'd 46 stations with 25 multipliers and 3 initials. Signals seemed very strong on 1296.

#### F2TU:

Philippe reports on his results for the 1st part of the contest -- I made 34 QSOs on 23 cm and 10 on 70 cm. On 1296 95% of my QSOs were on SSB ... F6CGJ (55/55), OE9XXI (55/55), EA3ADW (43/43). In the 2nd part, I will be calling on 2304.020 each hour for 10 min from 23 Nov at 1900 to 24 Nov at 0400. I have new telephone numbers work (33)3-29-56-12-36, Home (33)3- 29-56-23-40, and Fax at work (33)3-29-55-04-80. I now have an FHX35LG LNA on 23 cm and an NE42484 on 13 cm giving Sun noise of 15 dB and 14 dB respectively with a solar flux of 68. I am also preparing a new PA with a Russian GS23B tube for 23 cm. If anyone has experience with this tube, I am interested in cavity sizes and results.

# F5FLN:

Michel writes -- I was very disappointed to have to cancel my flight for the EME Conference due to a conflict with business. Work has been keeping me very busy, and I have a new baby - born in May. She makes us very busy too! I haven't been QRV, but I have purchased one of K1FO's 2 x 3CX800A7 PAs. I

hope to come back on the Moon soon. Herve, F5HRY and his group are preparing for the next conference in PARIS in 1998. I hope to see all the gang in '98.

## F6KSX:

Jean-Jacques (F1EHN) report on F6KSX group activity on 10 GHz, (e-mail F1EHN) -- During the 1st part of the ARRL EME we made 7 QSO: On 26 Oct WA5VJB (O/O), WA7CJO (559/549), WB5LUA (O/O), AA5C (M/O) for initial #17, S56UUU (O/O) and DJ7FJ (O/O), and on 27 Oct I4CHY (O/O). The operators were F6DLA, F6ECX and F1EHN. The system was a 3.3 m dish with vertical pol, 40 w (at the horn) with TWTA, 0.7 dB NF FHX13LG LNA (F1EHN design) and F1EHN auto track V4.2.1. All QSOs were made on random with good signals for all stations. But we were very disappointed by the poor activity on the 3 cm band. We think the problem is a result of the rules of the ARRL Contest. All the bands are enabled during the same weekend. Many stations have to take some skeds to operate several bands in the same week end. So, a band like 10 GHz where there are less OMs, has a poor activity on random. F6KSX group believes the rules should be changed to reward random QSOs or to reserve specific weekends for specific band. This will improve the activity for each band. For example, F6KSX was QRV on 10 GHz for the 1st part, and is planning to put station on 23 cm for the 2nd part of the contest.

## **G3LTF:**

Peter reports -- We had a few gremlins in the 1296 drivers but the real problem was the weather that you sent us in the way of your old second hand hurricanes!. I had to work so long on the 1296 system on Friday night that I didn't start until 0100 and was falling asleep by 0400, but at least it all worked. Saturday night started OK and I got on the Moon at about 2 hours after rise (tree blockage), but at 0130 the wind began to really blow hard and continued for the remainder of the contest with gusts up to 80 mph. My game plan was to come on 432 on Sunday evening and clean up! No way could I undo the dish in that wind. This is why I built it to retract into the ground! I have a long feeder run now compared to the old QTH and the loss is 2.5 dB. I was also down in power on the 1st night, probably only 200 w at the dish. Later in the day I improved things by about 1.5 dB. There is still plenty of improvements to make. The dish is under illuminated on 1296, as I'm still using the old dual mode horn (0.5 f/d) and the PA drive drops off during a 2 min transmission. On 432 the illumination of the dual dipole is about right. Anyway, there seemed to be a lot of activity from Europe, but not very much from NA. Nothing from W4 and W5 was heard. I worked on 1296, on 26 Oct KB2AH, EA3UM, F5PL, EA6ADW, SM4DHN, W2UHI, OE9XXI, F6CGJ, F5PAU and VE1ALQ, and on 27 Oct YL3AG, OH2AXH, SM3AKW, F1ANH, ZS6AXT, F2TU, F5PAU, DD1XF, OE5JFL, DL0SHF, SM6CKU, G3LQR, DL9EBL, F5AQC, OZ4MM, OK1CA,

HB9BBD, GW3XYW and N2IQU for a total 28x17. CWNR were G4DZU, KD5RO, WB0DRL - many times, CT1DMK, IK3COJ, K3EAV and AA6WI. Heard were HB9SV and DF9QX. Sun noise was about 15 dB on 432 and 16/17 dB on 1296 with an SF of 70.

#### **G4DZU:**

Doug writes about his contest activity on 1296 -- Due to pressures at work I've not been QRV for a couple of months. Just to make things worse I slipped a disk a couple of weeks before the contest which gave me troubles sitting in a chair for long periods. [Ouch!] A couple of days before the contest I was getting 9.6 dB of Sun noise with an SFI of 70. I also put another YD1336 in the cavity, once tuned it gave 800 w out. I worked on 26 Oct YL3AG/A (559/539), on 27 Oct SM4DHN (569/549), OE9XXI (569/549), F6CGJ (569/549), KB2AH (569/449), AA6WI (439/329), F2TU (O/O), VE1ALQ (449/529), F1ANH (449/449), OH2AXH (549/539), EA3UM (O/O), DL0SHF (O/O), F5PAU (O/O) and DL9EBL (579,559), and 28 Oct W2UHI (539/539), N2IQU (549/530), WD5AGO (O/O), K2UYH (559/559), EA6ADW (O/O) and PA3CSG (449/449). I experienced problems on the 28th with my headphones going faulty. This resulted in using a pair from the hi-fi head phones which didn't reduce any of the noise from the blower. I am now up to initial #35 on 23 cm and can't wait for the next leg of the contest.

## **HB9BBD:**

Dominique ended the Oct contest period with 34 QSOs to bring him to initial #76. Initials included KL7SB, G3LQR and OK1CA. He expects to be authorized to put up a 10 m dish in about four weeks. The new dish will be located about 3 km from his QTH. The dish has 26 ribs and is covered with stainless steal mesh. Dominique will still keep a station at his home as well.

## **I2COR:**

Luigi reports on the I2COR team during the 1st part of ARRL contest -- We worked only 28 QSOs on 432 because of a problem with the hydraulic tracking system. Stations worked were OE5JFL, JS3SIM, OH2PO, DL9KR, SM4IVE, I5CTE, EA3DXU, G4RGK, DK3WG, IW5AVM, DL9NDD, G4ALH, K1FO, G3HUL, RA3LE, DL1EJA, K4QIF, HA1YA, SM3AKW, NC1I, UT7VF, N2IQU, YO2IS, WA4NJP, KB8ZW, UA6LGH, UT5DL and S57QM. Local new is that IK2RTI, Gianfranco is a new station loc at JN55AD near the I2COR station. He is, at moment, QRV on only 2304 with a 3.6 m dish, W2IMU feed, 110 w out and NE32484A LNA. In the contest, he QSO'd on random OZ4MM and WB5LUA. I2COR will be QRV again in Nov. Skeds for I2COR and IK2RTI can be made by email to: Luigi, IK2TLA

# **JA4BLC:**

Yoshiro sends his Sept and Oct Contest report -- I worked on 1296 MHz, on 16

Sept JH3EAO (O/O), and on 29 sept JH5LUZ (449/549), and on 432, on 28 Sept VE6TA (O/O) for initial #232, JA2TY (O/O) #233 and on 29 Sept JH4JLV (539/559). On 25 Oct I succeeded in an extra sked with DL9EBL on 2320/2424 MHz (579/569) and (56/55) on SSB for initial #11 - this was the 1st time I have heard signal off the Moon on 2320 - very big from Karl!! Many thanks Rainer DF6NA for arranging the sked via e-mail. After my success on 13 cm, I QSY'd to 23 cm and worked HB9BBD (539/519) and EA6ADW (559/549). Just after the moon-rise on 26 Oct, I found conditions poor on 432 - due to a RX problem. The signals of the big guns were merely in M-O quality instead of expected 559. I thus decided to concentrate on 1296 MHz on Saturday night. On 26 Oct I worked on 432 K5GW (449/559) for initial #234 and JL1ZCG (559/559), and on 1296 AA6WI (539/439), JH3EAO (O/O), KD5RO/2 (439/449), JH5LUZ (549/549), W7GBI (559/559), YL3AG/A (559/559), HB9BBD (549/519), OE5JFL (569/559), EA3UM (559/449), SM3AKW (559/549), OE9XXI (579/559), F5PAU (569/O) for initial #56, F1ANH (569/449), F2TU (559/539), F6CGJ (559/559), EA6ADW (559/559), SM4DHN (569/539), OH2AXH (559/559), F5AQC (549/539) #57, SM6CKU (549/549) #58 and DL0SHF (559/549), and on 2320/2424 DL9EBL (579/569) - plus 12 QSOs on 144. On 27 Oct, I cured the faulty TR-relay which caused the RX problem the previous night. I worked on 432 K4QIF (O/449), K1FO (449/449), NC1I (559/559), W7GBI, K0RZ (449/559), KB8ZW (O/449), JA2KRW (449/559), 7M2PDT (O/O), JA5OVU (549/549), JA9BOH (449/449), UR5LX (559/559), OH2PO (559/559), SM4IVE (559/559), DF3RU (559/549), OE5JFL (559/559), DF6NA (O/O), DL9EBL (559/559) #235, DL9KR (579/579) and SM2CEW (559/559), and on 1296 F5PL (559/559), ZS6AXT (549/449), PA3CSG (569/559), IK3COJ (449/339) and DD1XF (O/O), plus 3 QSOs on 144. The contest total for Oct was 63 stations of which 21 were on 432, 26 on 1296 and 1 on 2424. Nov contest activity will be limited to only Sunday night because of a business trip. My friend Hideki, JA4CMZ, (20 km south of JA4BLC), heard some unidentified signals on 10.368 GHz from Europe on Saturday night. He says nothing was heard on Sunday. He uses a horizontal linear feed on 2.5 m solid dish. He hears 10.7 dB of Sun noise and 0.75 dB of Moon noise, but has no PA at the moment. I need QSL information (mail address) of IY4ARI and YL3AG/A. [Can anyone help?]

# JA9BOH:

Kimio's contest report for 70 cm follows -- I was QRV with a 1.1 KW RIW PA, 8 x HB 20 el vert pol yagis and QSO'd on 26 Oct at 0922 K4QIF (449/439), 0928 N2IQU (569/549), 0935 K2UYH (559/549), 1050 KD4LT (559/549), 1059 K1FO (559/449), 1105 K5GW (569/569), 1126 7M2PDT (O/O), 1649 SM4IVE (O/O), 1659 UR5LX, (559/549), 1704 DL9NDD (449/529), 1712 OZ4MM (559/549), 1723 DF3RU (449/559), 1727 DL9KR (579/559), 1744 OH2PO (569/559), 1753 SM3AKW (449/549), 1850 DK3WG (449/O), 1918

ON5OF (O/O) and 1924 OE5JFL (579/559), and on 27 Oct 1017 W7HAH (O/O), 1026 NC1I (569/559), 1042 KB8ZW (449/449), 1049 K5WXN (339/449), 1100 W7GBI (559/559), 1120 JR9NWC (M/M), 1126 K0RZ (449/559), 1137 W9QXP (O/O), 1255 JL1ZCG (O/339), 1304 JA4BLC (449/449), 1316 JA5OVU (O/O), 1430 9M2BV (O/O), 1806 DL0AR (O/O), 1824 HA1YA (569/O), 2004 SM2CEW (559/549), 2021 G4RGK (O/O) and 2043 YO2IS (O/O) for a total of 35x19. Faraday supported my modest 8 yagi station this year. One yagi was out of service on Saturday and repaired before Sunday Moonrise. There were 12 JA 432 EME station reported on, but it was difficult for me to QSO with most of them due to cross pol. Heard and CWNR were JS3SIM, JA2KRW and DK8VS. I was also active on 2 m and worked 25x12 there. I need Info about the DL0AR club station. My standings on 70 cm are up to initial #263, DXCC 45 and WAS 40 (for 7 years).

## JH4JLV:

Kazuhiko Sminanaga's results for the 1st part of the follows: He QSO'd on 70 cm N2IQU, JA5OVU, JA2KRW, K5GW, JL1ZCG, JR9NWC, SM4IVE, DL9KR, OH3PO, OE5JFL, OZ4MM, NC1I, K4QIF for initial #32, K1FO and SM2CEW for a total of 15x10. Heard were JA2TY, JS3SIM, JA6XED, JA9BOH, 7M2PDT, W7HAH, K2UYH, JR4AEP, KD4LT, UR5LX, DK3WG, K0RZ, JA4BLC, K5WXN, W9QXP, DF3RU, OK1KIR and DL9NDH. He is using and HB 2 x 3CX800A7s amp and HB 6 x 24 el FO yagi array, and will be QRV during the 2nd part.

#### KORZ:

Bill worked the following 70 cm stations in the contest: On 26 Oct DL9KR, JL1ZCG, K1FO, K2OS, K2UYH, K4QIF, K5AZU, K5GW, K5WXN, K9BCT, KB8ZW, N2IQU, N9AB, NC1I, OH2PO, OZ4MM, SM4IVE, VE1ZJ, VE6TA, W2CRS, W7CI, W7FN, W8MQW, WA4NJP, WA7BBM, WB0GGM, WB6IMC, WD5AGO and WI7Z, and on 27 Oct 7M2PDT, 9M2BV, JA4BLC, JA5OVU, JA9BOH, JH1XUJ, KD4LT, W1ZX, W7GBI, W7HAH, W9QXP and ZS6AXT. Heard were DL9NDD, I2COR, KA0RYT, K3LFO, NA4N, OE5JFL, PY5ZBU, UR5LX and W6WE. Initials were with K5AZU #218 and a new state, K4QIF #219 and WB6IMC #220. The 1st weekend score was 41x19. It soon became apparent to Bill that with fixed hor pol, he wasn't hearing Eur stations. The NA stations were strong and probably some of the best NA to NA conditions existed in some time. His echoes were consistently strong both nights. Bill also noticed that when listening to NC1I and K1FO working Eur, their signals were down and the usually strong Eur stations they were working were very weak. Usually there is one favorable night or time for Eur, but wasn't the case this time. Bill has rotated his 8 x FO22 array to fixed vert pol for the Nov weekend, in the hope, but always a gamble, that he will work more of the Eur stations.

# K1FO:

Steve spent some extra time getting all his equipment in perfect shape for the 1st contest weekend. Conditions at night were great the week leading up to the contest with some of the best echoes he has ever heard. Unfortunately Steve's contest plans received a major setback when he came down with a bad cold on Friday. This limited both his operating time as he had to take breaks for sleep both nights. The cold also seemed to slow down his operating ability. Conditions were great on Friday night and Saturday morning. Libration was low there appeared to be little Faraday rotation with strong signals. In addition the weather on the US east coast was perfect, More importantly, the 70 cm operators were demonstrating excellent operating skills. He had few QRM problems, heard good sending with proper character spacing and most answers to his CQ's were very close to his own echoes! On Saturday night and Sunday morning conditions weren't quite as good and operating habits deteriorated significantly with much more QRM problems (most likely due to lack of sleep for the operators). Stations worked were on 13 Oct, WB6IMC (449/579) for initial #497 - 1st QSO at new QTH which is in a new grid DM13, (Jon has his 4 Yagi array working well as the QSO was the day after new moon), on 18 Oct W9QXP, on 23 Oct N2IQU, NC1I, on 24 Oct K4QIF (569/569) #498 - now in a new state (NC) and grid FMO6, KA0RYT and DL8OBU, and on 25 Oct W8MQW - great echoes with his new 8 Yagi array, K5WXN - also good signals with his new array, NA4N also good signals with his new 8 yagi array, K4QIF and W8MQW on SSB. He QSO'd the 1st night of the contest W8MQW, K9BCT(/4), N9AB, K2OS, NA4N, VE1ZJ, G4ALH, VE6TA, EA3DXU, PA2CHR (449/O) #499, WA4NJP, SM3BYA, ON5OF, K5AZU, DL9NDD, WB0GGM, WI7Z, OH2PO, DF6NA, DL8OBU, RA3LE, K4QIF, K0RZ, S57Q, W6VPH (449/559) #500 at last - I thought that I would never make to #500, G4FUF, DF3RU, G4RGK, KL7HFQ, W2CRS, DL9KR, UT5DL, K5GW, HP3XUG, WB6IMC, W0KJY, N2IQU, KB8ZW, K5WXN, KF0M, F1ANH, WA7BBM, KB0HH, W7CI, NC1I, W7FN, K2UYH, W6WE, 7M2PDT, JA2KRW, JA5OVU, JH1EFA, JL1ZCG, JR4AEP, JR9NWC and JA9BOH. At moonrise on the 2nd night Steve had very strong interference from the PavPaws radar as he was looking right at the radar location on moonrise and there was also strong local tropo. In addition he had some strong noise until the moon elevation was over 10 degs. Steve worked SM4IVE, DK3WG, I2COR, HA1YA, G3HUL, UT7VF, DL1EJA (549/549) #501, SP5CJT, YO2IS, OM1TL, UA6LGH, ON4KNG, UR5LX, SM3AKW, KD4LT, IW5AVM, DJ6MB, K3LFO, UT1PA, W7HAH, W7GBI, WA6BJE, KA0RYT, JA3IAF, JS3SIM, JA4BLC, JA6XED (same as JA6ZHR), JH4JLV, JJ1NNJ, JH7PAV and W9QXP as the moon set. On Sunday night Steve had about an hour of moon before the end of the contest. This time the moon rose 10 degs off of the PavPaws Radar, but the radar clicks were again 40/S9! The only stations he managed to work during that time were OE5JFL, G3SEK and ZS6AXT for a 1st contest weekend

total of 91 x 32. While Steve was a bit disappointed with his score it was 16x3 better than last year after the 1st weekend. In addition he operated about 8 hours less due to his bad cold. Steve also reminds us that it's now time to start thinking about dates for the 1997 ARRL EME contest. He feels that the best weekends are 18-19 Oct and 15-16 Nov. Moon times and conditions for those dates will be very similar to the 1996 dates, but closer to perigee, higher declination (up to +18) and slightly higher sky noise. These dates are also 2 weeks removed from the Eur VHF and UHF contests which may also encourage more European EME activity. The higher sky noise may influence the 144 MHz operators to choose the following weekends, 25-26 Oct and 22-23 Nov. Those dates are near apogee, have lower dec and have higher predicted path losses at 70 cm and higher bands have weaker predicted signals. Steve corrected another error in his 70 cm initial list. S57Q was deleted as it is the same station and operator as S57QM. 70 cm EME totals for K1FO are #501 initials, 49 states and 72 DXCC.

# **K40IF:**

Rusty was active on 432 during Oct -- I OSO'd on 23 Oct RA3LE, N2IOU on SSB, NC1I, K5WXN, K1FO, NA4N and KA0RYT, and on 24 Oct WI7Z, WB6IMC, NA4N, K1FO, NC1I, KA0RYT and W8MQW. In the Contest he contacted on 26 Oct W8MQW, DL9NDD, G4RGK, G4FUF, DF6NA, OE5JFL, UR5LX, DL6NAA, DL9KR, RA3LE, K9BCT/4, VE1ZJ, WB0GGM, K5AZU, G4ALH, OH2PO, N9AB, VE6TA, DL8OBU, UA6LGH, UT7VF, EA3DXU, UT5DL, K2UYH, KB0HH, N2IQU, K1FO, OZ4MM, WB6IMC, NC1I, DF3RU, SM4IVE, K0RZ, W2CRS/0, SM3AKW, W7FN, KF0M, K5GW, K5WXN, W7CI, KB8ZW, WD5AGO, F1ANH, WI7Z, KL7HFQ, W6WE, KB0HH dup, W6VPH, 7M2PDT, JL1ZCG, JA2KRW, JA5OVU, JS3SIM, JA9BOH, JR9NWC, JR4AEP, ON4KNG, I2COR, DL1EJA, ON5OF, and on 27 Oct HA1YA, SP5CJT, DK3WG, IW5AVM, UT7VF dup, DJ6MB, OM1TL, K2OS, YO2IS, K3LFO, W1ZX/3, KA0RYT, WA7BBM, W7HAH, JA3IAF, JA4BLC, W7GBI and JH4JLV for 76x29. I did hear several stations that were not worked so hope to pick them up next month. I felt that conditions were quite good the whole week end. Echoes were very strong with little libration. I really did not hear a lot of very weak signals except for a couple of weak JAs that I could not ID. I guess EME is becoming more mature as a form of communications as time goes on. During Nov, I plan to operate the 1st night on 432 and then spend the 2nd on 1296 entirely.

## **KD4LT:**

Scott had very little operating time during the 1st weekend of the contest, a total of 5 hours. Scott was on "baby watch" awaiting the arrival of his 1st grandchild which actually came a week later. [Congratulations Grandfather!] Scott found that conditions were very good on both nights. Prior to the contest, Scott

changed the feed system to a N7ART design with only one set of dipoles instead of the dual dipole arrangement Scott had been using. This new feed was far less confusing to use for pol adjustment, but did add the TR relay back into the system. Stations worked were F1ANH, DL8OBU, DL9NDD, OH2PO, K2OS, NC1I, DL9KR, OE5JFL, SM4IVE, PA3CSG, UT7VF, UA6LGH, DF3RU, N9AB, K2UYH, EA3DXU, RA3LE, S57Q, VE1ZJ, F5SDD, G4ALH, PA3CHR, KB0HH, G4RGK, K9BCT/4, WD5AGO, W8MQW, N2IQU, JA5OVU, JA2KRW, 7M2PDT, JL1ZCG, JR9NWC, JR4AEP, JS3SIM, JA9BOH, K5GW, K1FO, IW5AVM, K0RZ, SP5CJT, YO2IS and HP3XUG. Scott's contest score was 43x27 for the 1st weekend. Eight initials made for a great time. Scott hopes to have more operating time next contest weekend. The new 6.7 m dish for 23 cm is nearing completion. The dish is covered and awaiting mounting. Scott hopes to be on with the new system, and band, by Jan. KD4LT's totals are now initial #289, 45 DXCC and 33 WAS on EME.

## NL7F:

Bill is almost QRV on 1296 from Alaska. He heard his 1st EME signals during the Oct contest weekend. Copied were W2UHI, OE9XXI, WD5AGO, W7GBI, K2UYH and AA6WI. Many others were heard but not identified. Bill's station consists of a 3.6 m dish, W2IMU feed horn, KB2AH FHX35LG preamp, Down East Microwave transverter, Icom IC-251A IF and AF9Y FFTDSP software. Under construction is a KB2AH 4 x 2C39 cavity PA. His e-mail address is: Bill, NL7F. Bill hopes to have TX ready by the New Year.

## NC1I:

Frank writes -- We have just completed the 1st weekend of the EME cotxtast and are already looking forward to Nov. The majority of the operating was performed by the father and son team of WF1R and NC1B. Unfortunately I have not been able to be very active since though DUBUS contest, and have not had much opportunity to evaluate my system performance. Sun noise measurements taken on 23 Oct confirmed my recent concerns that things may not have been working as well as they should have. I was only measuring 15.5 dB, down about 5 dB from the expected 20-21 dB. SWR checks also revealed a problem. My normal SWR is better than 1.2:1. The current SWR is closer to 1.5:1. The day before the contest I went up the tower and removed all the coax connectors and checked for water. All connectors appeared dry. The preamp box also looked fine. A quick visual check of the open wire phasing lines did not reveal any problem. We made the decision to run the 1st weekend with the array the way it was, since it will take an entire weekend to really check everything out. I suspect there may be water in the outer LDF4-50A phasing lines. These lines are open at one end where they are silver soldered to the open wire phasing lines joining each of the four bays. It will not be an easy task to remove (unsolder) these cables, check them, and resolder them back in place 15 m up,

hanging from the frame work!! Hopefully all will be OK by the 2nd weekend, and we can work all those we missed this time, particularly the smaller stations. Conditions during the days just before the contest seemed pretty good. Conditions during the contest seemed challenging at times. Perhaps much of this was due to the status of my array. Polarity really seemed strange. Over 80% of our QSO's were made with the array vertical for transmit and receive. Libration fading seemed unusually high also. The 1st Eur was not worked until 1 hour into the contest. I would never have guessed our 1st (9) QSO's would be with NA. We also experienced a much slower rate than usual during the 1st several hours. Very few initials were worked. JA activity seemed very good with (13) stations logged. More JA's could have been worked if I could rotate my polarity below 13 degs in el. We'll just have to continue to live with that and be thankful we even have pol rotation. My contest log reads as follows: 26 Oct at 0009 VE1ZJ (439/539), 0015 K0RZ (559/559), 0019 W8MQW (559/569), 0022 K2OS (549/449), 0029 KD4LT (569/559), 0034 K9BCT (539/569), 0040 K3LFO (449/459), 0043 N9AB (569/569), 0049 K2UYH (569/579), 0055 EA3DXU (339/439), 0112 RA3LE (449/559), 0117 UR5LX (569/559), 0134 KB8ZW (559/559), 0150 WD5AGO (539/549), 0200 PA2CHR (539/549), 0208 ON5OF (549/559), 0218 F1ANH (559/559), 0231 WB6IMC (549/569), 0234 OH2PO (569/559), 0237 UT5DL (579/579), 0244 G4RGK (549/559), 0250 G4ALH (539/559), 0254 OE5JFL (579/569), 0258 DL9NDD (579/589), 0304 F5SDD (539/559), 0315 K4QIF (539/569), 0325 VE6TA (539/559), 0337 KL7HFQ (539/O), 0344 N2IQU (569/569), 0353 WB0GGM (539/559), 0402 W7FN (559/569), 0409 OZ4MM 559/569), 0424 W2CRS (539/549), 0434 HP3XUG (539/539), 0458 K5WXN (569/559), 0507 K5AZU (579/579), 0514 W6VPH (559/559), 0529 KL7HFQ (O/O) DUPE, 0534 WA4NJP (579/599), 0549 WI7Z (539/559), 0556 W7CI (569/569), 0630 KB0HH (539/549), 0637 K1FO (559/569), W6WE (539/559), 0655 K5GW (569/579), 0844 JL1ZCG (579/439), 0853 JA2KRW (579/579), 0900 JA5OVU (569/569), 0906 JR9NWC (569/559), 0931 7M2PDT (539/559), 0949 JR4AEP (539/O), 1013 JA6XED (O/349), 2227 SM4IVE (559/559), 2232 SM3AKW (549/559), 2249 S57Q (O/O), 2303 SP5CJT (O/559), 2314 HA1YA (559/559), 2319 ON4KNG (549/549), 2326 G3HUL (549/559), 2330 UR5LX (559/559) DUPE, 2344 OM1TL (539/559), 2348 UT7VF (539/559), and on 27 Oct at 0003 DK3WG (539/559), 0020 I2COR (559/559), 0032 G4FUF (549/539), 0044 YO2IS (539/559), 0051 DL1EJA (569/449), 0103 DL9KR (589/589), 0130 DJ6MB (559/559), 0145 UA6LGH (539/559), 0206 IW5AVM (539/0), 0225 PY5ZBU (539/559), 0239 W7HAH (559/579), 0245 NA4N (539/O), 0307 KA0RYT (549/559), 0324 UT1PA (539/549), 0333 IN3KLQ (539/549), 0339 WA6BJE (559/569), 0419 KF0M (O/O), 0605 SM3BEI (O/O), 0614 DF6NA (O/O), 0634 DL3EAG (M/M), 0643 KL7HFQ (539/559) DUPE, 1004 W7GBI (559/559), 1025 JA9BOH (559/569), 1037 JH4JLV (549/559), 1048 JA3IAF (539/559), 1103 JJ1NNJ (O/O), 1109 JS3SIM (549/559), 1115 JA4BLC (559/559), 1123

W9QXP (539/549), 1150 JA6XED (O/449) DUPE, 2325 G3SEK (O/449), 2334 DF3RU (559/549) and 2347 ZS6AXT (539/579). Our contest total was 92x33.

### OE9XXI:

Peter writes -- On 1296 I worked on the 1st day EA6ADW, YL3AG/a, OK1KIR, W2UHI, G4DZU, EA3UM, HB9BBD, ZS6AXT, F5PL, KD5RO, K3EAV, ON5RR, (549/559) for initial - 2.5 KHz low in freq, KB2AH, VE1ALQ, AA6WI, WB0DRL, WA4NJP, KB3PD, SM4DHN, G3LTF, CT1DMK, VE1ZJ, F2TU, VE3BQN, F6CGJ, N2IQU, F5PAU, OE5JFL, DF3RU, JA4BLC, JH3EAO, DH9FAG, OH2AXH, JH5LUZ, SM3CKU, IK3COJ, F1ANH, DL0SHF, SM3AKW, 4X6UJ (M/O) - marginal signal, OK1CA, F5AQC, GW3XYW, DL9EBL and G3LQR, and on the 2nd day K2UYH, YL2KA, DK7LJ, W7GBI, WB5LUA, PA3CSG, HB9SV, and around 2000 several QRZs from a station too weak to identify. (JR4BRS called also at this time). My contest total was 53x28. DD1FX, JR4BRS and KA0RYT were also heard.

### OH2DG:

Eino has been QRT for almost 3 years, since his antennas came down in a big storm. He now has his tower back up, but only with a tropo array. Instead he has been working on an 8 m dish which will be sturdy enough to survive the Finish winters. The mount and half of the parabolic trusses are already complete. He plans to start erecting his dish in the spring - when the Sun comes out again - and expects to be QRV in about a year. He sends his thanks to OZ4MM and OE5JFL for their assistance with this project. Eino's new telephone number is +358-19-535693.

#### **ON4KNG:**

Peter e-mails his report for the ARRL contest on 70 cm -- On 26 and 27 Oct I operated only 7 hours. Saturday morning I had a failure in my transverter (RX part) and Sunday evening we had high wind in Brussels. Results were lower than in the ARI contest (31 Aug/1 Sept). My score is 21x14. Initials were DF6NA, IK6EIW, SP5CJT and DXCC 29 and DL1EJA to bring me to # 98. I hope to go over the 100 initial mark in Nov.

### ON5RR:

Marc writes -- It has been some years now since I became interested in 23 cm EME. But finally I am active. In fact in the mean time I have been working on a new house, I got married, all together I was out of radio for about 4 years. During the Summer holidays my spouse went home to visit her family (she is Hungarian) and so it was the ideal time to reconstruct everything. Since June I have started assembling the station and now I have a 6 m dish and VE4MA feed. The station is an old TS700A, with modified front-end, variable output power and added audio filters going to a modified SSB- Electronic transverter

and a single 2C39. Output power is about 40 w on 1296. In the receive line I have a WD5AGO preamp (NF 0.47 dB, gain 17 dB). az and el control of the dish are still manual, but I have a digitized readout of the bearing. Together with Mike (ON7EH) we listen to the EME contest on 26 Oct at 0000. Some minutes later we heard the 1st echoes coming from the moon. The signals seemed quite loud. We heard EA6ADW (539), F6CGJ (539), OE9XXI (559), KB2AH (559), VE1ALQ (529), SM4DHN (529), F5PAU (519) and EA3UM (539). At 0124 we heard OE9XXI calling CQ and we replied. Peter responded (559/549). We tried to work KB2AH but there was apparently too much ORM. We shut down around 0300. When I tried to check into the 20 m net, 30 v was inadvertently put on my 1296 transverter! It took until Sunday evening to get the transverter working again. We thus missed the remainder of the contest. We plan to be active again in Nov and work some more stations. Skeds can be sent to my new address (Marc Kleyn, Burchtlaan 28/3, 1785 Merchtem, Belgium, or tel +3252373041, FAX +3223525357, or e- mail at: Marc, ON5RR. I can only receive e-mail.)

# OK1CA:

Franta sends information about his contest activity on 23 cm -- I worked on 26/27 Oct ZS6AXT (559/559), F2TU (559/539) for an initial #33, OE9XXI (579/569), GW3XYW (559/559), F5PL (559/459) #, YL3AG/a (559/559) #34 and a new country, OZ4MM (559/549), EA3UM (449/439) #35 and new country, F6CGJ (566/449) #36, DL0SHF (559/549), HB9BBD (449/519) #37, G3LTF (449/449), OH2AXH (559/539) #38 and new country, F5PAU (449/449) #39, F1ANH (559/549), OE5JFL (556/559), VE1ALQ (339/556), EA6ADW (559/549), F5AQC (449/549) #40, DL9EBL (579/559), W2UHI (549/559), KB2AH (559/549), WD5AGO (339/339), OK1KIR (339/539), N2IQU (559/549), K2UYH (559/559) #41, SM6CKU (549/539) #42 and KD5RO (339/549). Our own echoes were a strong for the most part. I was QRL therefore I worked only 5 hours.

#### **OK1DFC:**

Zdenek is a new station on 432 from JO60tp. He hopes to make his 1st EME QSO during the Nov Ccontest weekend. He is using a K1FO Lunar Link 1.5 KW PA with 4 x 38 el M2 yagis and ..4 dB NF MGF 1302 LNA. Zdenek's address is (Z. Samek, Okruzni, 435 13 Mezibori, Czech Republic); his tel is 0043-601-285298 and FAX is 0042-35-57701.

## S56UUU:

Marko writes -- This year the weather was nice for the 1st weekend of the EME contest. Since my azimuth axis is still human driven, S57RA came to help me, and we got QRV on 10 GHz at about 1900. I worked DJ7FJ and F6KSX, both O/O. I heard I4CHY, but only got QRZ from him. And that's all! We did not

hear any other stations. 1st I thought that everybody was waiting for the W's to get up, so we waited and listened... 0330, more than two hours until after moonrise in Arizona. the crew almost frozen, no Jim... so we packed up. Was the activity really so low or do I have a receiver problem? I only got 1.3 dB of Moon noise, but I think that should still be enough, for the bigger guns at least. Last month I got a new dish. It is the same (tiny) 3 m as my old one, but much less deformed and shallower (easier to feed), so I hope to gain a dB or two. I plan to redesign my whole mechanical setup, and make a REAL dish mount for the new dish (with motors and other luxury this time). I'll probably be QRT for at least a year. I'll be taking the old dish down soon, the new owner is coming to pick it up, so I probably won't be QRV for the 2nd weekend this year. About 1/f noise - I don't think it originates in mixing. Yes, those products are dense, but only if we let m and n run to infinity. But that would mean that we must consider the mixing products of frequencies that go to infinity. Even with an infinitely fast non-linearity, the higher order products decrease very rapidly, with a power proportional to their order. A real diode includes many physical mechanisms that limit its speed, so products beyond order 9 or 11 are negligible. There are many other factors that can shape the noise in a SSB receiver. The shape of the IF filter, gain characteristics of the AF stage, close-in phase noise of the BFO, etc. In modern receivers, at least up to and including 23 cm, the "apply 2 frequencies to a nonlinear element" type of mixer is seldom used. A balanced switching type of mixer is usually used. The mathematics of this type of mixer are quite different. A doubly balanced mixer made of ideal switches is essentially linear to the RF input. For the signal levels usual for EME reception, we can also treat a mixer made of real switches as perfectly linear. On the other hand, a simple RC time constant in the audio path could easily be responsible for the observed 3 dB/octave rolloff. Actually I think that a direct conversion receiver is not a good idea because of the noise: It converts the close-in noise of the LO to the baseband.

## W6/SM0PYP:

Paul writes -- I was hoping to be QRV on 10 GHz during the 2nd part of the contest, but Murphy showed up again. Yesterday I tested my 20 w TWTA and it is dead. I hope that only power supply is bad, but it is very hard to say. I need data for the tube and schematic for the power supply. It is a Thompson TWT - TH3631W and the power supply is a TH22631 K/RW. I will be getting 10' dish from Ray, N6AMD, and I hope to have the dish mounted in 2 weeks. During the 1st part of the contest I was only QRV on 144 with a single yagi.

#### **SM2CEW:**

Peter's Sept and Oct activity reports follow -- During the Oct Contest weekend I could only operate a very limited time because of family activities that had

higher priority. So, I was only on late towards moonset on Saturday and Sunday nights, and moonrise. I worked the following stations: SM4IVE, DL9KR, OE5JFL, UT5DL, OH2PO, SM3BYA, DF3RU, JA9BOH, JH4JLV, JR9NWC, YO2IS, EA3DXU, G4ALH, 7M2PDT, UR5LX, JA4BLC, I5CTE, JS3SIM, JA5OVU and S57Q for a total of 20x12. Conditions on moonrise Sunday were excellent. Please look out for a new station, VK2FZ/4 who was listening in the contest, he heard DL9KR and called him many times with not even a QRZ in return. The Sept SW gave us in Eur some VERY unfriendly operating hours for the NA window. Therefore I was only on for a short period of time around moonset. Activity from the US was very poor at that time. I heard and CWNR KL7HFQ on 432 with good signals. He called CQ once and then disappeared. On 1296 I was called by VE4MA (549/449) and CT1DMK (O/O) for a new country, DXCC 23 and initial #86. Louis had a good signal. We have worked on 144 before, so now we only need to complete on 432 to make a 3 band EME. Also heard was EA6ADW with very good signals. After that I went to 432 to work Shep, W7HAH (549/569). On 6 Oct I worked DD1XF and DJ9YW on 1296. I have finally finished rebuilding all my power-supplies and driver amps since throwing out a 7' tall rack in early June to make some more room in my shack.

I find the discussion regarding the operating hours quite amusing. Now that the operating hours were decent in the US for the Eur window, they were terrible over here. The ones who were complaining during the summer are now pleased while others are "suffering". What should we look for when deciding the SW's? It can't just be good operating hours in the States. Let the moon-position be the determining factor, thus operating hours WILL vary over the year but in the end, everyone will have their share of good and bad. SM2CEW will be active on 432 and 1296 in the 2nd leg of the contest.

### SM6CKU:

Ben is QRV again after nearly 3 years absence -- I finally put my rig together in the new shack and tried it off the moon. On receive all was as before, but on transmit I had no more than 275 w from the old 6-tube amp. Anyway, I worked 35 stations and among them 11 initials - YL3AG/A for initial #112, then DL0SHF, JH5LUZ, F5PAU, DD1XF, K3EAV, OK1CA, W2UHI, VE1ZJ, YL2KA and DK7LJ #122 on SSB. The final station QSO'd was W7GBI - good to hear Charlie again! I will go ahead and improve the station and extend my band capability. Ben's e- mail address is: Ben, SM6CKU

## **UR5LX:**

Sergej was active in the 1st part of the contest. He QSO'd 74x35, and logged initials with RA3LE, K4QIF, K5AZU, SM3BYA, S57Q and DL1EJA #297. Sergej found propagation sometimes excellent, but activity not very high. He

spent the last 1.5 hours calling CQ without an answer. New stations heard were DL1IU, DK0NA, JA6XED and DL0AR. Other Ukraine stations QRV in the EME contest were UR5LX, UT5DL, UT5EC, UT7VF and UT1PA, and from Russia RA3LE, UA6LGH, UA9FAD and UA4API. Sergej's standings are now 36 states, 54 country and #297 initial.

#### **UR4LL:**

Alex is now QRV on e-mail -- Today I received my 1st NL by e-mail. It's wonderful and fantastic here in Ukraine. I have my home e-mail system. My home address is: Alex, UR4LL. Ukraine also has its own telephone code - 380. My work and home telephone changed in Aug to: ++(380)-57-64-5-19-20 H, ++(380)-57-64-5-12-43 W (4.30-14.00). UR4LL, Sergej's telephone is ++ (380)-57-64-9-86-38.

# **VE1ALQ:**

Darrell's report for the 1st half of the contest is "not that great" -- I thought conditions the 1st night were excellent. I did more listening to the pile-ups than I did transmitting, looking for initials. I did find some new ones: G3LTF, VE3BQN and F2TU. There were more, but I could not get their attention. My total was 26x20. The 2nd night was a "blow" out. We had a high pressure area move through that brought very high winds and temperatures dropping like a rock. I had to leave the dish parked at 123 deg AZ, and call it at night at 0030. The next moon rise WX was great, but the moon only got to 14 deg - then the end of contest. Since my last report I have added 6 new initials, the 3 mentioned above plus YL3AG/A, CT1DMK and YL2KA, [This a different station than YL3AG], to bring me to initial #72. I now have a new feed system installed consisting of a "dual dipole" diagonal feed, designed by N7ART. [How about details?] It appears to hear very well. Along with this feed I now have my 70 cm dual dipole feed in place with 360 deg rotation. I ran into a screen supply problem on my 70 cm Amp. So I was not able to TX during the 1st half on 70 cm. That has now been repaired and I will be on 70 cm as well during Nov. I am still running the 8791 tube, as I have not quite finished the 8938 Linear, but I hope to before spring. I notice that all 70 cm NA stations were exactly vertical early on moonrise. I'm not sure if that changed or not, since my 70 cm TX screen supply had 2 dried-up and shorted filter Caps. WX permitting I will be on 70 cm as well as 23 cm in Nov.

## VE4MA:

Barry concentrated on the higher during the Oct part of the contest, but met with some troubles -- I have concentrated on trying to get QRV on 3 cm. I had everything running for the 1st contest night. I heard lots of 10 GHz stations earlier in the week and on the weekend including G3WDG (O), WA7CJO (569), WB5LUA (O), AA5C (M) and F6KSX (O). I was running 35 w, but had an

SWR problem, (bad flex WG jumpers), prior to the weekend. I made repairs and had 1dB feedline loss, but no one heard me! I have concluded that my HB dish is just not good enough for 10 GHz. [Are you sure? If you are hearing stations with comparable power, they should you unless something is wrong with the TX - not the antenna!] On the 2nd night I put up the 5.7 GHz feed in driving rain, but could not find Moon noise. So I missed my sked with DJ7FJ. I had a sticking WG switch, (again). I was soaking wet, it was still raining and I did not put the 23 cm feed back in as planned. Winter is here now in VE4, but I plan to be on 13 and 23 cm and then 6 and 23 cm for the last contest weekend. I now have e-mail at home: <a href="Barry, VE4MA">Barry, VE4MA</a>

#### W1ZX:

Willie was for the ARRL EME Contest. He worked on 26 Oct only OH2PO and N9AB. He was troubled with heavy QRM all evening, then at 0300 the el drive sheer pin broke - so no elevation. Willie's 2nd evening was a little better with 3 to 4 hours operating. This was Willie's operating limit, with the heavy QRM present. He worked were SM4IVE, DL9KR, DL9NDD, DL1EJA for initial #272, N2IQU, UR5LX, K4QIF, K0RZ, IW5AVM and W7FN - all very loud signals. No doubt Willie missed many stations because of his QRM problems. Willie heard 5 to 6 stations calling at one time all evening. Stations needing skeds with Willie should contact K1RQG on the 20 m EME net or by e-mail. Those EME Conference attendee that have a problem with the center section of their Proceedings, (printed backward), can return these proceedings to (Willie Mank, W1ZX, 7620 Bensville Rd, Waldorf, MD 20603), and Willie will see that corrections are made.

#### W7HAH:

Shep's Contest Results -- I worked 432 only on 19 Oct for a score of 17x10. New stations worked on random were WB6IMC for initial #176 and W8MQW #177. Other stations worked were OH2PO, K0RZ, NC1I, K1FO, DL9KR, N9AB, K5WXN, W2CRS, KA0RYT, WI7Z, JA9BOH, K4QIF, JS3SIM, 7M2PDT and W7GBI. Conditions were fair to good.

# **W8MQW:**

Chuck reports -- I worked 10 stations on 70 cm during the contest and heard about 25 others. My operation Sunday UTC was cut short during the Eur window by a storm. I struggled with JL1ZCG for about an hour. I sent "O's after he got my call but never got a report back. Still looking for my 1st JA on EME. I never worked one when I was on 2 m EME. DL9KR and SM4IVE were incredibly loud. I had never seen an EME signal move my S meter before. N2IQU was the loudest NA station I heard.

# WD5AGO:

Tommy reports on his activities from Tulsa, OK -- Working 12 hour days 3 days

a week (dual class) and my 2 kids are taking up most of my time, but I did manage to get stuff together for the Oct Contest weekend. I rebuilt the 70 cm feed (dual dipole H- V) to put in the 5.5 m dish. This gave some improvement, but I am not satisfied with the station on 70 cm (500 w and 0.3 dB NF LNA). I am considering using 8 x F9FT yagis for Nov. On 23 cm signals seem to be normal, but its harder to keep up with all the higher power stations, (only 250 w at the feed here). My totals were 18x12 on 70 cm and 31x18 on 23 cm. In Nov, as before, I will be on 432 the 1st night and 1296 the 2nd night. I also have just completed some more 2 stage 23 cm LNAs for those that were asking. Performance (0.24 NF at 27 dB gain on my NF meter) .2 to 0.35 at the NF contest.

#### **K2UYH:**

Contest conditions seemed excellent this year. I was joined by an excellent team consisting of K2TXB for 70 cm operation the 1st day, and K2RS and AF2R on 23 cm the 2nd day. I was especially impressed with Ray, K2RS's CW skill. He could pull stations out of pile-ups I did not even know were there. I had boosted my power on 432 with a new 8938 PA. On 1296 the system was unchanged. Murphy did not stay away entirely. The primary winding of the plate transformer for my 1296 PA decided to short in the middle of Eur window prime time. Fortunately I was able to use my 432 PA power supply as a backup, and we lost little more than 1/2 hour of operating time. We QSO'd on 432 on 26 Oct at 0002 DL9KR (589/579), 0007 UR5LX (569/559), 0011 OE5JFL (569/559), 0025 WA4NJP (559/O), 0029 DL9NDD (559/559), 0634 N2IQU (589/559), 0047 NC1I (559/579), 0100 F1ANH (579/549), 0109 DF3RU (559/559), 0116 UT7VF (559/O) for initial #572, 0120 RA3LE (559/569), 0135 KD4LT (579/569), 0135 F5SDD (549/559) #573, 0157 EA3DXU (559/549), 0206 SM4IVE (589/579), 0215 G4FUF (549/559), 0233 K4QIF (569/559) #574, 0313 G4RGK (549/559), 0324 OH2PO (559/559), 0334 W8MQW (549/559), 0340 K5GW (559/559), 0400 K5AZU (569/569), 0417 DF6NA (O/O), 0428 WA7BBM (559/559), 0437 SM3AKW (559/549), 0506 W7CI (559/439), 0520 WB0GGM (549/439), 0529 K9BCT/4 (559/439) #575, 0535 VE6TA (549/539), 0542 KB8ZW (549/549), 0547 W2CRS (549/439), 0554 W0KJY (439/559), WI7Z (559/449), 0610 W6UPS (559/449) #576, 0617 KORZ (559/439), 0621 WB6IMC (569/549) #577, 0627 K5WXN (559/549), 0632 WD5AGO (559/539), 0644 W7FN (559/559), 0651 K1FO (569/569), 0737 VE1ZJ (449/559), 0803 W6WE (449/O) #578, 0820 JL1ZCG (559/539), 0839 JA5OVU (559/549), 0851 7M2PDT (539/459), 0932 JA9BOH (549/559), 0940 JA2KRW (559/559), 0948 JR9NWR (549/559) and 0956 JA6XED (449/O). Someone was still call us at 1000, but the Moon was too far into the trees, (3/4 blocked), for us to copy. The next day on 1296 we worked at 0111 F6CGJ (579/579), 0113 partial DL0SHF (579/?), 0118 F1ANH (569/559), 0123 KB2AH (599/569), 0126 ZS6AXT (569/579), 0129 OK1KIR (569/569), 0131

KD5RO (559/579), 0136 IK3COJ (559/449), 0143 K3EAV (559/559), 0149 KB3PD (559/559), 0153 W2UHI (579/579), 0157 YL3AG/A (569/559) for initial #135 and country 31, 0301 EA6ADW (559/569), 0203 F5PL (559/569), 0206 OK1CA (559/559) #136, 0212 OH2AXH (579/579), 0214 AA6WI (559/439), 0220 WB0DRL (559/559), 0224 G4DZU (559/559), 0235 CT1DMK (459/559), 0244 SM6CKU (569/569), 0249 N2IQU (579/579), 0255 VE3BQN (M/O), 0300 OE9XXI (589/569), 0338 F5PAU (579/559), 0352 OE5JFL (579/569), 0410 DK7LJ (54/44) #137 on SSB, 0423 WD5AGO (569/559), 0456 WB5LUA (559/559), 0557 W7GBI (559/549), 0921 JH3EAO (559/559) and 1026 JH3LUZ (559/539). 23 cm became very quiet after 0600 and we decided to take a little nap until the JA window. We end with 48x20 on 70 cm and 30x20 on 23 cm. We plan to follow the same operating pattern in Nov. Our main problem during the contest was tree blockage to both the east and west. Because of this blockage there was no point in even trying during the short rising Moon window on Sunday. Most of the leaves should be gone by the Nov weekend. This should extend our window a bit.

# **NETNEWS**

**YL3AG/A** is using a 32' dish and can be reached at (Vitauts Klimavichus, PO Box III,LV-1069, Riga, Latvia).

HZ1AB has an RIW amp complete. He will not be on for the 2nd contest weekend, but plans to be QRV on 432 late this winter or in the spring.

G4ERG has not been QRV since the beginning of the year. Peter is building a array of 16 yagis with polarization rotation. He hopes to be QRV again sometimes early next year.

KJ7HB has found a RIW type amp and hopes to be QRV in a month or so.

SP5CJT QSO'd 16 stations on 432 during the 1st part of the contest.

UA4API on 70 cm in the contest made 6 QSOs.

UA6LGH made 24x15 on 432 including initials with DL1EJA, K5GW and K4QIF for #191.

UA9FAD made 7 QSOs on 70 cm including OZ4MM for initial #122.

**UT7VF** is looking for skeds.

VE3BQN was QRV on 1296 during the contest with his 16' dish and 200 w plus.

ZS6AWK, Danie has acquired a 5 m TVRO dish, after having been inspired by hearing the guys on 70 cm in the ARRL contest. He is QRV on 70 and 1296, but still need PAs and LNAs.

KB2AH operated exclusively on 1296 and ended with a score of 46x26. Even with the new elevated dish, tree blockage still prevented a JA QSO in Oct. He will be looking for a JAs again in Nov with its fewer leaves.

KF0M, John is QRV on 432 with  $2 \times 9$  lambda M2 yagis and 800 w. He is taking skeds and will be active during the contest.

AA6WI was QRV on 1296 during the 1st contest weekend, but will be traveling out of country right afterwards, and may not make it back in time for the 2nd weekend.

ON5OF has a new 700 w amp on 70 cm.

PA3CSG plans to be QRV on 70, 23 and 3 cm in Nov. Gert wants to know if anyone has had any experience with 8877 by Jolita?

VE6TA was active on 70 cm the 1st contest weekend and ended with 14x12. He will be on 23 cm for the 2nd weekend.

KA0RYT/0 was QRV from EN24 on 23 cm with 150 w. He worked W2UHI for the 1st ever Minn 23 cm EME QSO. Ron ended the contest on 70 cm with 19x13 (EN 34) and on 23 cm with 3x3 (EN24). In Nov KB0PYO, Mark will be QRV on 23 cm from EN24. Ron/Mark can be reached via e-mail at: Mark, KB0PYO for 23 cm skeds.

VE3KDH, Kevin is QRV on 70 cm with 4 x 38 el yagis and 100 w. His tel is 905-878-91910.

DL9EBL will be on 23 cm and on 13 cm TX 2320 and RX 2304. He achieved the 1st 13 cm DL-JA QSO with JA4BLC (569/579) on CW and (55/56) on SSB.

NC7K, NV is QRV on 70 cm.

NU7Z was not QRV 23 cm during the 1st contest weekend, but is trying to be on 70 cm with 4 x FO33 yagis and 1 KW for the 2nd.

W6WE is looking for 70 cm skeds.

DK3WG's e-mail can be sent to: Stefan, DK3WG

DL8OBU needs QSL cards from K5JL and K5GW.

EA2LU is only QRV on 2 m. He has not yet received permission for 10 GHz operation. He will be back on 70 cm later.

EA2AVY will be QRV on 432 in about 2 months with 1.2 KW and 4 yagis.

DF3RU has sent 2 tubes to 4X1IF. G4ALH will be QRV on 70 cm both contest weekends. In Oct he achieved 24x14.

S57Q, Klaus has a change for the directory. His zip code should be 68290. His locator is JN76. OZ4MM was QRV only on Saturday in the contest, and worked 50 stations on 70 cm.

WB5LUA is working on 24 GHz. The station consists of a 5 m dish and 4.5 dB NF LNA. He is recieving .4 dB of Moon noise and 6 dB of Sun noise.

DJ7FJ will be on 6 cm and 10 GHz in Nov and is looking for skeds. VK2FZ/4 is a new 4 yagis station. He copied DL9KR and called him many times in Oct, but received no response. He is building a bigger amp.

KL7HFQ worked in Oct DL9KR, N2IQU, SM4IVE, K4QIF, K1FO, OE5JFL, OH2PO and NC1I. He is available for sked on weekends but will be gone during 2nd contest weekend.

DL9NDD worked DK0BY and say this station is the as same the DL6NAA club station. He needs K1RQG's QSL.

DL1EJA, Oliver made 34 initials in the contest. He is a new 70 cm station with 16 yagis and 1 KW. He will be active the 2nd weekend, and will take skeds, but does not plan to be QRV during normal SWs.

K5JL will be QRV on 70 cm the 1st day and 23 cm the 2nd day in Nov.

W6VPH's address is (Lawrence W Anshley, 2535 So. Myrtle, Monrovia, Los Angeles, CA 91016), DM04?

W0AH is the new call of W2CRS.

EA6ADW has ended activity from Majorca for this season. Peter will be back in March. UT5DL ended with 28x16.

G4RGK's early score was 35x19.

KD5RO had 30x20 on 23 cm in Oct. Dave has cured all his problems and expects to have 600 w on 23 in Nov.

IW5AVM achieved 19x14.

JA6XED's address is (Hisao Tsukamoto, 212 Kyo-machi, Kurume- city Fukuoka 830). His tel in shack is +81-942-34-3332. The system is an 8m dish with f/d of 0.36, MRF648 LNAs and 8938 PA at about 800 w. Note this station is the same as the JA6ZHR club station.

WA8WZG will be active on 23 cm with 100 w and a 5 m dish from EN81 in Ohio in the 2nd part of the contest. He has already worked WB5LUA and W2UHI. His e-mail address is: WA8WZG

W4HHK made 2 contacts on Friday night of the contest: OZ4MM and WB5LUA. On Saturday night be kept skeds with IK6EIW, but heard nill. WB6IMC ended with 21x12 in Nov.

UT1PA worked OZ4MM and K5GW to bring him to initial #60. In the contest he worked 13x10.

EA8/ON5FF will be QRV on 70 cm in Nov from IL18pb. AL7JM was not on for the 1st weekend, but will be on 70 cm the 2nd weekend.

# FOR SALE

K1FO, Steve still has several LA-70B, 1500w, 70 cm amplifiers available along with PS-70 power supplies. He has a very limited number of LA-200, 2 m amplifiers left.

W1ZX, Willie has some leftover EME Conference items for sale: Hats (\$10.00) Clocks (\$3.00) with the '96 Int'l EME logo of course. Proceedings are also available for \$US12.00 + shipping \$3.00 in the States (110 have been sold to this date). General Radio IF Amplifier (30 MHz) 1236A, \$US 150.00 & shipping, Dielectric-Coaxial Dynamics 1000a wattmeter, same as Bird 43 wattmeter, \$175.00, \$190.00, \$200.00 with new meter movement call, AIL 75 Noise Figure Meter with cabinet \$US 275 & shipping, AIL Noise Generator 7010, Diode Noise Generator type 70, Hewlett Packard UHF Noise Source 349a + shipping CALL, Several Transco "Y" type Relays with "N" Connectors \$US 50 & shipping; Call Willie at 301 645

5584, 2000-2230 EST, FAX 301 645 6853, 24 hrs, Email: Willie, W1ZX V3BQN is looking for brick device with 30 w output for 23 cm. KB2AH is producing VE4MA like 1296 feeds with built-in IMU type circular polarizer. He also has a complete line of 1296 HPAs (6, 4, 2 or 1 x 7289 amps) available. Contact Tom at 908-223-8124 or e-mail at: Tom, KB2AH

### WHO RECEIVES THE NL?

VE1ALQ has been working on a project to identify all who are receive the NL. The idea is to know who receives the NL skeds lists. In this way skeds with stations who have little chance of learning of them, can be eliminated -- If you receive the 70 cm and Above News Letter and your CALLSIGN does NOT appear in this list. Or if there is a correction to be made please contact VE1ALO as soon as possible. We know there are a number of calls that will not appear in this 1st printing, and for that we do apologize. But we do want to see your call in the list. The list follows: A22BW, AA4TJ, AA6WI, CX9BT, DD1XF, DF3RU, DF5YY, DF6NA, DF9QX, DJ7FJ, DJ8LO, DJ9YW, DK3WG, DK8VS, DL4EBY, DL6WU, DL9EBL, DL9KR, DL9NDD, EA2BK, EA2LU, EA3DXU, EA3UM, F1ANH, F2TU, F5EHQ, F5HRY, F5PAU, F6CGJ, F9FT, G0BPU, G3HUL, G3LQR, G3LTF, G3SEK, G4ALH, G4ERG, G4GCM, G4RGK, GM3JFG, GW3XYW, HB9BBD, HB9BHU, HB9JAW, HB9SUL, HB9SV, I2COR, I5TDJ, I6PNN, IK1HWG, IK3COJ, IK5WJD, IK6EIW, JA2JRJ, JA2KRW, JA4BLC, JA5OVU, JA6ALB, JA6CZD, JA8ERE, JA8FLY, JA9BOH, JH0YSI, JH1MOM, JH3EAO, JH4JLV, JL1ZCG, JR1RCH, K0KJX, K0RZ, K0TLM, K1FO, K1OYB, K1RQG, K1VYU, K2MPH, K2OS, K2RIW, K2TKN, K2UYH, K3EAV, K3HZO, K3LFO, K3XA, K4QIF, K5AZU, K9BCT/4, K9KFR, K9ZZH, KA0RYT, KB2AH, KB3PD, KB8ZW, KB9CT, KD6R, LA8LF, N1AXB, N2IQU, N2LIV, N4GJV, N4MW, N4PZ, N6OC, N7ART, N7AUV, N9AB, NA4N, NC1I, OE5JFL, OE6AP, OE9ERC, OE9XXI, OH2DG, OK1KIR, ON4AOD, ON4KNG, ON4UV, ON5OF, ON5RR, ON6JY, OZ4MM, PA0AVS, PA0PLY, PA0SSB, PA0ZN/W6, PA3CSG, PA3DZL, S51ZO, S56UUU, SM0PYP/W6, SM2BYA, SM3AKW, SM6CKU, SP5CJT, VE1ALQ, VE2XX, VE1ASO, VE3BQN, VE3CF, VE4MA, VE7BBG, VK1VP, VK2ALU, VK2BE, VK2FZ/4, VK3UM, VK5MC, W0KJY, W0RRY, W1CAL, W1JR, W1ZX, W2CRS, W2JWJ, W2UHI, W2WD, W3EP, W3IIT, W4HHK, W4RDI, W5RCI, W6DXJ, W6XS, W7FN, W7GBI, W7HAH, W7ID, W7VQQ, W8IDU, W8MQW, W8TN, WA4N, IP, WA4OFS, WA4ZTK, WA5V, IB, WA7C, IO, WA7TZY, WA8WZG, WA9FWD, WB0GGM, WB2VVV, WD5AGO, WI7Z, YO2IS, ZS6AXT, ZS6JT, ZS6PT. Darrell may be reached at any of the following: (postal) Darrell Ward, PO Box 576, Grand Bay N.B, Canada E0G 1W0; Phone/FAX: 1506 738 2734/1507 738 8512; E-mail: Darrell, VE1ALQ.

# **TECHNICAL:**

F1EHN/F6KXS on 12 Oct conducted Sun noise measurements on 10 GHz during a partial eclipse of the Sun. The eclipse lasted about 2.5 hours. They used their 3.3 m dish and F1EHN's tracking software. The results of their measurements is shown in the figure at the end of this NL. When the eclipse was max (about 50% reduction is solar area), the sun noise level was reduced about 3.3 dB. The test confirms the receive performance of the F6KXS system and the good accuracy of the F1EHN tracking software.

# SILENT KEYS

I learned of KL7WE's death from KL7HFI, who sent the following notice: "It is with deep sadness that I inform you of the passing of Tim Pettis, KL7WE, over the weekend. Tim's 24 year career at Alascom began July 29, 1972 as a technician. On July 5, 1996 he left the company as a Supervisor, Network Maintenance. Funeral arrangements will be announced later. Condolences may be sent to Tim's wife, Susan, at 12950 Mission Circle, Anchorage, AK 99516. Our thoughts are with her and the rest of Tim's family at this time." Tim will be remembered for his record breaking EME dxpeditions in which he criss-crossed the USA with a compact yagi array with the ability to rotate pol. He gave many of us 70 cm. He was a true EME pioneer, among his many other accomplishments in ham radio. He had retired this summer and looking forward to being able to spend more time with his hobby. Word has it that he was out dancing with his wife when he was struck with a fatal heart attack.

I was equally troubled to learn that CT1WW also passed away. Tiago Frederico was a avid VHF/UHF amateur. He gave me my 1st 432 QSO with Portugal and was host of a major 70 cm EME dexpedition only a few years ago. Tiago was in his 50's and also died suddenly.

1997 INTERNATIONAL EME MARATHON CONTEST: The IRC is again sponsoring an EME Marathon. The rules are the same as last year. The stations makings the most points, (contacts x [DXCC countries +1] x 100), in there class during the year wins. You can only work a station once in a given day. Competition is by band and power class - same as in the

# FINAL

W0KJY is working on the EME standings and requests that I remind stations to submit their up-dated status. VE1ALQ also request that I ask that all recipients of the NL, when renewing their envelopes if they would include their callsign on them. This information would be used to up-date the "WHO RECEIVES THE NL" list which appeared for the 1st time in this NL. Darrell notes that it would be "nice" to know how many other active EMEers, (and who they are), are relying on the same NL. This has been a long NL and hopefully a worthwhile one. TNX for all the reports. The majority of material is now coming in by e-mail. E- mail reports are very convenient, but PLEASE do not submit lists of QSOs in column form. Although this look great on e-mail, I can not print in this form in the NL. Removing all the carriage returns and spaces is very time consuming. Lets all hope for good weather and a repeat of the excellent Moon conditions, (with better Faraday alignment for those in need of it), in Nov.

CU then ... 73, Al - K2UYH.

This information was obtained from Scott, KD4LT

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For comments or corrections: Rein, W6/PA0ZN.